

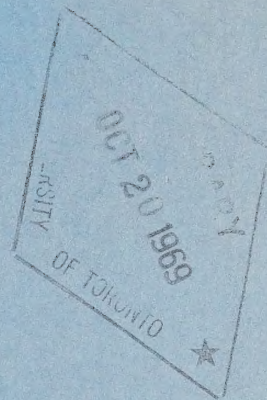
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SIXTEENTH ANNUAL REPORT



ON ACTIVITIES UNDER THE MARITIME MARSHLAND REHABILITATION ACT FOR THE FISCAL YEAR ENDED MARCH 31, 1965

MARITIME MARSHLAND REHABILITATION ADMINISTRATION

DEPARTMENT OF FORESTRY, CANADA

Government
Publications

JUN 10 1968

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Sixteenth Annual Report of Activities under the Maritime Marshland Rehabilitation Act, 1964-65

INTRODUCTION

The Maritime marshlands cover an estimated 100,000 acres principally around the Bay of Fundy.

Although the majority of farms consist largely of upland holdings, and farms consisting entirely of fertile marshlands are in the minority, the marshlands have long been considered important to the economy of the region. Some areas were protected for agricultural use over 300 years ago.

Federal assistance for the preservation and extension of this resource was arranged after a combination of factors had seriously handicapped the owners.

The Maritime Marshland Rehabilitation Act was passed in 1948. Under the Act, federal responsibility is to provide the main protective works, and that of the provinces is to assure proper land utilization.

The Act was administered by the Canada Department of Agriculture until early 1964 when this responsibility was transferred to the Department of Forestry of Canada. The Maritime Marshland Rehabilitation Administration is the departmental agency established for the program.

ADMINISTRATION AND ORGANIZATION

HEADQUARTERS

The headquarters of the Maritime Marshland Rehabilitation Administration was established in Amherst, Nova Scotia, in the summer of 1949, under the control of a Director responsible to the Deputy Minister.

ENGINEERING BRANCH

The Engineering Branch is divided into three categories:

- (a) Surveys, Design and Drafting
- (b) Construction Services
- (c) Workshop and Equipment.

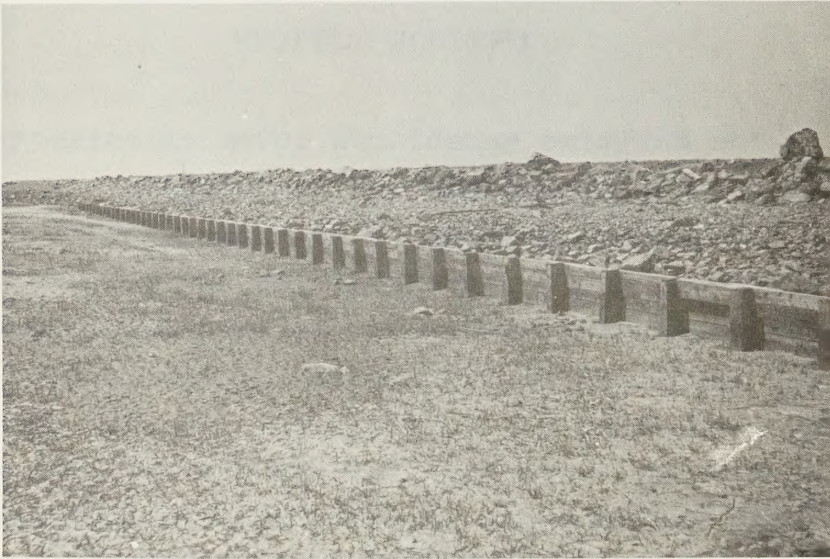


Figure 1 - Masstown Marsh, Colchester County, N.S. An experimental type of fore-shore protection placed in an attempt to halt undermining of the dyke toe by wave action.

(Photo No. 23-138)

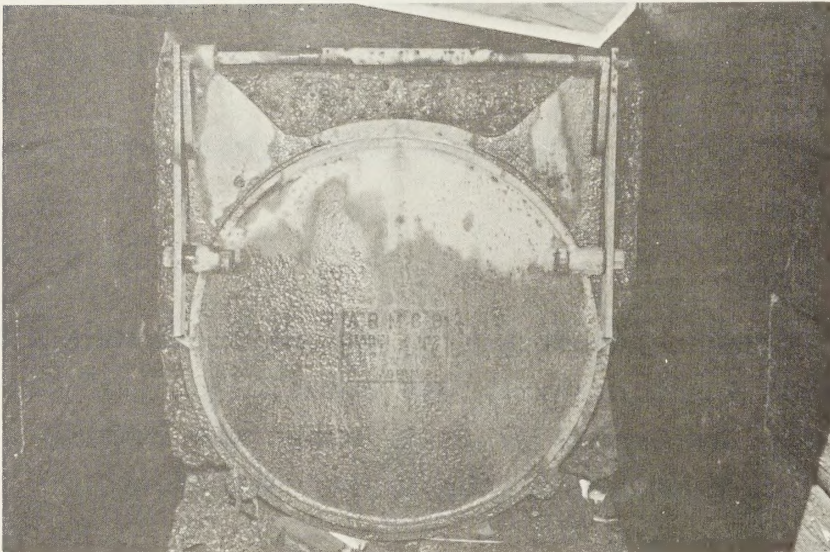


Figure 2 - Cole's Island Marsh, Westmorland County, N.B. A standard 42 in. Armco flap gate installed with a modified hanger and a fully concreted head wall.

(Photo No. 44-122)

Construction divisions operate from Amherst and Windsor, Nova Scotia, and temporary additional offices are established in the field, from time to time, as required.

The main office in Amherst also includes a complete Administration and Accounting Branch.

The Maritime Marshland Rehabilitation Advisory Committee was established early in the program and functioned as required under Section 8 of the Act. The Act states "No work shall be undertaken in any Province ... unless (a) the work has been recommended by an Advisory Committee...".

REVIEW OF PROGRESS TO DATE

PROJECTS AND ACREAGES PROTECTED

All projects approved by the Minister and not incorporated into larger projects are designated as active. The number of active projects in each province on March 31, 1965, and the acreages protected are as follows:

Province	No. of Active Projects	Acreage Protected
Nova Scotia	86	44,054
New Brunswick	39	36,936
Prince Edward Island	1	275
TOTAL	126	81,265

Details on the active projects in each province and the acreages protected are listed in Appendix I.

CONSTRUCTION OF WORKS

The protection of marshlands from the tides is normally accomplished by the construction of dykes. Structures, known locally as aboiteaux, are incorporated at major stream crossings where fresh water runoff is to be discharged. River bank control and foreshore protective works are installed where required.



Figure 3 - Westcock Marsh, Westmorland County, N.B. The result of heavy wave action on exposed dyke. The face has since been protected with heavy rock.

(Photo No. 5-72)



Figure 4 - Westcock Marsh, Westmorland County, N.B. Plank facing, used in early construction as protection from wave action, later superseded by heavy rock.

(Photo No. 5-75)

The protecting works include:

250 miles of dyke, 75 miles having rock or timber facing;

435 aboiteaux;

4 major tidal dams;

18 miles of river bank control installations.

A graph showing the annual progress from 1949 to 1965 appears in Appendix IV.

The construction trend, directed by economic feasibility studies, has been toward protecting areas in groups, using a single large aboiteau, or dam, instead of miles of dyke and large numbers of small aboiteau. This has already been done in the cases of the Shepody, Tantramar and Annapolis dams. This trend will in time render obsolete some of the protective works constructed during the current program.

THE CONSTRUCTION PROGRAM FOR 1964-65

Standard Projects

Works previously constructed were improved and extended on projects in Nova Scotia and New Brunswick.

It has been found advantageous to quarry, haul and place required protective rock for most projects during the winter months. This program was successfully continued last winter on the following projects:

- | | | |
|------|-----|--------------------------------------|
| N.S. | 4 | Grand Pré, Kings County |
| | 14 | Elderkin, Hants County |
| | 23 | Masstown, Colchester County |
| | 39 | Round, Colchester County |
| | 42 | Amherst Point, Cumberland County |
| | 50 | Herbert River, Hants County |
| | 77 | Princeport, Colchester County |
| | 97 | Highland Village, Colchester County |
| | 115 | Nappan-Maccan, Cumberland County |
| N.B. | 5 | Westcock, Westmorland County |
| | 12 | Pré d'en Haut, Westmorland County |
| | 16 | Dixon Island, Westmorland County |
| | 19 | Beaumont, Westmorland County |
| | 20 | Gautreau Village, Westmorland County |
| | 24 | Aulac, Westmorland County |



Figure 5 - Tantramar Marsh, Westmorland County, N.B. An old ditch in the Jolicure area, prior to cleaning.
(Photo No. 56-902)



Figure 6 - Tantramar Marsh, Westmorland County, N.B. The new ditch in the same area shown above. Side slopes are 2 on 1, and bottom width is 9 feet.

Details of expenditures to date on all projects are recorded in Appendix II.

Special Projects

The existence of several multipurpose structures, serving as aboiteaux and highway or railway culverts, prompted the careful investigation of possible combined undertakings early in the rehabilitation program. Such investigations have been continued. Among the larger projects being considered are the Avon River Causeway, Hants County, Nova Scotia, in conjunction with the Nova Scotia Department of Highways and the Dominion Atlantic Railway. During the year, approval was granted for the construction of a major multipurpose dam on the Petitcodiac River, Westmorland Co., N.B., immediately adjacent to the City of Moncton. This dam will provide both protection for upstream marshlands and a highway crossing.

Investigations for ARDA

During 1963 the MMRA was designated as the operating arm of ARDA in the Atlantic Provinces. The studies and investigations requested by the provinces, principally under the Soil and Water Conservation program, have been closely related to the MMRA staff's demonstrated capabilities in the field of fresh water and tidal hydraulic engineering.

At the end of 1963-64 there was a total of 40 projects on which the provinces had requested studies and investigations. During 1964-65 this total was increased by 14 new projects.

The following table lists four general categories into which the various ARDA investigations fall, and the total number of studies requested by the Atlantic Provinces to March 31, 1965. The figures in brackets show the number of studies requested during the year 1964-65.

CATEGORY	N.S.	N.B.	P.E.I.	Nfld.	Total
1. Watershed Study	13(2)	2		1	16(2)
2. Multiple Purpose Dams	8(1)	3(2)	11(3)		22(6)
3. Drainage Projects	6	3			9
4. Flood and Erosion Control	12(3)	7(4)		2(1)	21(8)
	39(6)	15(6)	11(3)	3(1)	68(16)

The general categories include various subclassifications, thus, many of the listed projects fall into two or more general categories. Further details are contained in the listing of "MMRA Studies and Investigations for ARDA Projects" which appears as Appendix V. General location maps are included in Appendix VI.

The status of the 53 ARDA project studies and investigations carried out by the MMRA Staff was as follows at the end of March, 1965:

Nova Scotia

9 projects completed and reports forwarded to the Provincial ARDA Director,
6 projects on which investigation or design was in progress,
8 projects on which action was pending,
5 projects deferred or cancelled at the request of the Nova Scotia Government.

New Brunswick

5 projects completed and reports forwarded to the Provincial ARDA Director,
4 projects on which investigation or design was in progress,
3 projects on which action was pending.

Prince Edward Island

9 projects completed and reports forwarded to the Provincial ARDA Director,
2 projects on which investigation or design was in progress.

Newfoundland

2 projects on which action was pending.

APPENDIX I

MARITIME MARSHLAND REHABILITATION PROJECTS

Active Projects

Note: Acreages are based on information available on March 31, 1965, and include dyke rights-of-way, roads and creeks.

NOVA SCOTIA

Project No.	Name of Marsh	County	Acreage Protected Marsh
N.S. 2	Windsor Forks	Hants	465
N.S. 3	Falmouth Great Dyke	Hants	975
N.S. 4	Queen Anne	Annapolis	477
N.S. 5	Dugau	Annapolis	172
N.S. 6	Saulnierville	Digby	73
N.S. 8	Grand Pré (inc. Wickwire)	Kings	3,013
N.S. 11	Truro Dykeland Park	Colchester	878
N.S. 12	Victoria Diamond Jubilee	Colchester	527
N.S. 13	Dentiballis	Annapolis	348
N.S. 14	Elderkin	Hants	203
N.S. 15	Isgonish	Colchester	491
N.S. 16	Castle Frederick	Hants	145
N.S. 17	Falmouth Village	Hants	97
N.S. 18	Ryerson	Annapolis	86
N.S. 20	Advocate	Cumberland	489
N.S. 23	Masstown	Colchester	986
N.S. 24	Noel Shore	Hants	309
N.S. 27	Newport Town	Hants	338
N.S. 30	Allan River	Annapolis	122
N.S. 38	St. Croix	Hants	248
N.S. 39	Round	Colchester	86
N.S. 40	Fort Belcher	Colchester	181
N.S. 41	Habitant	Kings	677
N.S. 42	Amherst Point	Cumberland	2,252
N.S. 44	Converse	Cumberland	838
N.S. 45	Barronsfield	Cumberland	237
N.S. 46	River Hebert	Cumberland	1,052
N.S. 47	Selmah	Hants	188
N.S. 48	Centre Burlington	Hants	158
N.S. 49	Scotch Village	Hants	89
N.S. 50	Herbert River	Hants	74
N.S. 52	St. Mary's Bay	Digby	692
N.S. 53	John Lusby	Cumberland	821
N.S. 54	Minudie	Cumberland	2,711
N.S. 55	Seaman	Cumberland	441
N.S. 56	Wellington	Kings	3,105
N.S. 57	New Minas	Kings	304
N.S. 59	Brown Salt Pond	Yarmouth	294
N.S. 61	Kennetcook	Hants	169
N.S. 63	Maccan	Cumberland	200
N.S. 64	Glenholme	Colchester	292
N.S. 65	Bishop Beckwith	Kings	604
N.S. 66	Flemming	Colchester	277
N.S. 67	Onslow North River	Colchester	496
N.S. 68	Tregothic	Hants	576
N.S. 69	Martock	Hants	1,478
N.S. 70	Cheggoggin	Yarmouth	425

NOVA SCOTIA (Continued)

Project No.	Name of Marsh	County	Acreage Protected Marsh
N.S. 71	Goose Bay	Yarmouth	269
N.S. 72	Horton	Kings	309
N.S. 75	Armstrong	Hants	53
N.S. 76	Farnham Dyke	Kings	192
N.S. 77	Princeport	Colchester	49
N.S. 78	Athol	Cumberland	131
N.S. 79	Chambers	Hants	61
N.S. 80	Starr's Point	Kings	303
N.S. 81	Lower Truro	Colchester	399
N.S. 82	Kentville	Kings	71
N.S. 85	Mantua Poplar Grove	Hants	362
N.S. 86	Central Onslow	Colchester	291
N.S. 87	Chignecto	Cumberland	544
N.S. 88	Burlington	Hants	106
N.S. 90	Old Barns	Colchester	181
N.S. 91	Belcher Street	Kings	346
N.S. 92	Avonport	Kings	255
N.S. 93	Greenhill	Hants	53
N.S. 95	Fort Lawrence-Amherst	Cumberland	3,400
N.S. 97	Highland Village	Colchester	212
N.S. 98	Stewiacke	Colchester	146
N.S. 100	Wentworth	Hants	150
N.S. 101	Pereaux	Kings	113
N.S. 103	Annapolis River Dam	Annapolis	4,300
N.S. 104	Sunny Slope	Hants	17
N.S. 105	Belmont	Hants	72
N.S. 106	Fort Ellis	Colchester	203
N.S. 108	Argyle	Yarmouth	45
N.S. 109	Nappan River Dam	Cumberland	1,074
N.S. 111	Burntcoat	Hants	37
N.S. 112	Rhynds Creek	Hants	187
N.S. 113	Southside	Colchester	134
N.S. 114	Great Village	Colchester	-
N.S. 115	Nappan-Maccan	Cumberland	388
N.S. 116	Shubenacadie	Hants	111
N.S. 117	Tufts	Colchester	87
N.S. 119	Upper Maccan	Cumberland	169
N.S. 121	Green's Creek	Colchester	75
N.S. 125	Little River	Yarmouth	-
TOTAL			44,054

NEW BRUNSWICK

Project No.	Name of Marsh	County	Acreage Protected Marsh
N.B. 4	Allison	Westmorland	197
N.B. 5	Westcock	Westmorland	800
N.B. 6	Taylor Village	Westmorland	444
N.B. 8	Coyle Landry	Westmorland	305
N.B. 11	Belliveau Village	Westmorland	191
N.B. 12	Pré d'en Haut	Westmorland	113
N.B. 13	Dorchester	Westmorland	1,758

NEW BRUNSWICK (Continued)

Project No.	Name of Marsh	County	Acreage Protected Marsh
N.B. 14	Lower Coverdale	Albert	149
N.B. 15	Middle Coverdale	Albert	31
N.B. 16	Dixon Island	Westmorland	330
N.B. 17	New Horton	Albert	799
N.B. 18	Fox Creek	Westmorland	96
N.B. 19	Beaumont	Westmorland	207
N.B. 20	Gautreau Village	Westmorland	209
N.B. 21	Memramcook West	Westmorland	1,105
N.B. 24	Aulac	Westmorland	2,050
N.B. 25	Dock	Westmorland	42
N.B. 26	Dover	Westmorland	43
N.B. 27	College Bridge	Westmorland	873
N.B. 28	Upper Coverdale	Albert	45
N.B. 30	Calkins	Albert	227
N.B. 33	West Coverdale	Albert	260
N.B. 36	Boundary Creek	Westmorland	51
N.B. 37	Sackville	Westmorland	473
N.B. 40	Woodpoint	Westmorland	43
N.B. 41	Turtle Creek	Albert	125
N.B. 43	Creek's	Albert	93
N.B. 45	Chartersville	Westmorland	348
N.B. 46	Wilson	Westmorland	157
N.B. 47	Hillsboro	Albert	967
N.B. 50	Black River	Saint John	41
N.B. 51	Shepody River Dam	Albert	5,552
N.B. 54	Jones Creek	Westmorland	51
N.B. 55	Missaguash	Westmorland	333
N.B. 56	Tantramar River Dam	Westmorland	17,988
N.B. 57	Redbank	Westmorland	41
N.B. 58	Memramcook	Westmorland	215
N.B. 60	Petitcodiac River	Westmorland and Albert	-
N.B. 62	St. Martins	Saint John	184
N.B. 63	Petitcodiac River Dam	Westmorland	-
TOTAL			<u>36,936</u>

PRINCE EDWARD ISLAND

Project No.	Name of Marsh	County	Acreage Protected Marsh
P.E.I. 1	Johnston River	Queens	275

APPENDIX II

EXPENDITURES UNDER THE
MARITIME MARSHLAND REHABILITATION ACT

	<u>1949-64</u>	<u>1964-65</u>
Administration	673,893.59	42,767.13
Surveys and Engineering	2,065,450.66	80,895.08
Workshop and Construction Supervision	3,907,834.17	201,910.66
Construction and Maintenance of Projects and Special Surveys:		
<u>NOVA SCOTIA</u>		
Advocate	139,371.56	523.00
Allan River	51,286.71	54.57
Amherst Point	173,307.03	7,811.58
Annapolis Royal Town	27,624.41	-
Annapolis River Survey	27,049.60	-
Annapolis River Dam	1,606,275.82	6,571.64
Armstrong	19,955.96	45.00
Argyle	15,175.83	36.15
Athol	21,779.53	34.18
Avonport	113,220.43	3,017.56
Barronsfield	83,318.97	2,501.87
Bartlett's Beach	2,644.17	-
Belcher Street	123,122.56	497.76
Belmont	29,077.74	215.15
Bishop Beckwith	184,106.07	8,940.75
Brown Salt Pond	24,728.48	82.93
Burlington	47,048.85	114.90
Burntcoat	15,026.84	38.05
Castle Frederick	58,401.17	190.40
Central Onslow	49,341.91	41.40
Centre Burlington	37,935.55	79.90
Chambers	15,922.57	35.10
Chegoggin	32,845.12	-
Chignecto	46,997.98	-
Comeau	38,268.06	-
Converse	164,795.75	498.08
Dentiballis	109,703.49	-
Dugau	45,315.28	662.55
Elderkin	73,146.50	4,615.49
Falmouth Great Dyke	192,716.98	210.54
Falmouth Village	45,911.30	70.20
Farnham Dyke	34,882.38	616.85
Flemming	47,867.94	54.45
Fort Belcher	64,279.05	3,311.22
Fort Ellis	49,790.89	131.15
Fox Bow	20,242.73	-
Fort Lawrence-Amherst	85,458.23	-
Glenholme	65,691.08	134.85
Goose Bay	29,160.37	70.65
Grand Pré	619,408.18	10,979.58
Granville Centre	27,213.80	-
Greenhill	33,179.15	172.80
Green's Creek	34,787.38	77.91
Habitant	21,884.79	927.21

Construction and Maintenance of
Projects and Special Surveys (Continued):

Herbert River	28,025.67	2,555.36
Highland Village	79,999.40	3,904.20
Horton	105,669.84	5,109.89
Isgonish	177,124.30	776.26
John Lusby	142,373.14	268.62
Kennetcook	51,406.45	9.95
Kentville	21,585.17	86.00
Lower Truro	63,212.74	108.35
Maccan	40,758.48	159.48
Mantua Poplar Grove	87,162.30	4,495.54
Martock	172,425.94	7,974.99
Masstown	206,495.48	4,116.67
McKay	17,165.94	-
Messenger	3,457.06	-
Mill	7,321.94	-
Minudie	149,110.85	2,684.51
Morse	4,616.95	-
Morse Bishop	3,173.26	-
Moschelle	28,719.68	-
Mount Anne	60,302.71	-
Nappan-Maccan	23,162.26	3,853.61
Nappan River Dam	177,115.42	-
New Minas	100,924.95	423.93
Newport Town	75,584.32	3,999.34
Noel Shore	191,401.66	2,369.02
Old Barns	55,015.63	185.67
Onslow North River	79,410.98	248.80
Pré Rond	9,014.96	-
Pereaux	22,305.76	276.20
Princeport	17,511.45	250.00
Queen Anne	179,746.97	5,997.96
Rhynds Creek	52,284.46	2,731.48
Ricketson	2,519.54	-
River Hebert	258,114.51	1,556.58
Rosette	2,977.37	-
Round	37,860.47	1,968.69
Ryerson	56,921.39	1,519.27
Saulnierville	8,729.55	26.40
Scotch Village	30,700.47	55.45
Seaman	45,368.13	285.20
Selmah	27,492.14	410.15
Shipley	4,609.00	-
Shubenacadie	24,140.58	61.32
Southside	27,632.83	4,466.30
Starr's Point	121,282.82	2,006.30
St. Croix	99,133.01	4,294.46
St. Mary's Bay	113,520.74	1,436.45
Stewiacke	40,392.73	1,852.50
Sunny Slope	11,170.25	70.20
Tregothic	56,040.18	3,369.73
Truro Dykeland Park	127,186.96	161.95
Tufts	22,154.34	30.40
Tupperville	18,608.25	-
Upper Belleisle	32,091.75	-
Upper Nappan	54,929.55	-
Upper Maccan	28,175.87	687.35
Victoria Diamond Jubilee	96,132.18	4,186.18
Walker	5,210.13	-
Wellington	104,145.16	5,106.66
Wentworth	19,976.81	337.80

Construction and Maintenance of
Projects and Special Surveys (Continued):

Windermere	49,026.18	-
Windsor Forks	84,345.82	233.25
Woodworth	23,487.11	-

Subtotal for Nova Scotia Projects	8,816,930.13	140,073.84
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NEW BRUNSWICK

Allison	29,213.07	476.54
Aulac	302,529.15	8,740.26
Baie Verte	923.03	-
Beaumont	74,354.28	9,844.85
Belliveau Village	25,921.63	1,902.50
Black River	16,358.16	-
Boundary Creek	4,594.91	395.56
Calkins	111,816.57	2,591.40
Chartersville	63,689.70	256.65
Cole's Island	52,094.47	-
College Bridge	129,165.08	662.10
Coverdale	19.31	-
Coyle Landry	50,173.08	235.87
Creeks	11,676.66	429.38
Dixon Island	82,228.58	8,421.29
Dock	18,168.57	2,171.19
Dorchester	295,547.38	3,325.49
Dover	16,323.64	796.73
Fox Creek	40,640.03	106.62
Gautreau Village	110,044.01	3,531.61
Great	6,828.22	-
Germantown	11,909.61	-
Hillsboro	169,436.16	5,018.16
Hopewell Hill	72,406.13	-
Jones	4,803.31	-
Jones Creek	7,845.79	-
Log Lake	52,004.10	-
Lower Coverdale	63,211.43	92.83
Memramcook	54,378.63	195.00
Memramcook West	198,459.02	1,483.61
Middle Coverdale	19,941.53	-
Missaguash	11,534.63	-
New Horton	97,845.08	5,460.23
Pré d'en Haut	46,657.04	8,918.71
Red Bank	5,060.41	-
Sackville	63,687.24	342.30
Shepody River Dam	1,575,232.23	13,839.24
Shepody River Survey	26,334.47	-
St. Martin's	43,317.79	8,092.84
Tantramar River Dam	773,361.18	2,635.44
Tantramar River Survey	23,201.48	-
Tantramar West	45,616.39	-
Taylor Village	104,198.06	792.77
Turtle Creek	27,101.46	118.54
Upper Coverdale	19,970.43	118.54
Upper Dyke	11,149.33	-
Westcock	169,329.69	17,144.43
West Coverdale	81,659.98	926.77
Wilson	29,214.16	2,029.37
Wood Point	2,617.95	-

Subtotal for New Brunswick projects	5,253,794.24	111,096.82
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Construction and Maintenance of
Projects and Special Surveys (Continued):

PRINCE EDWARD ISLAND

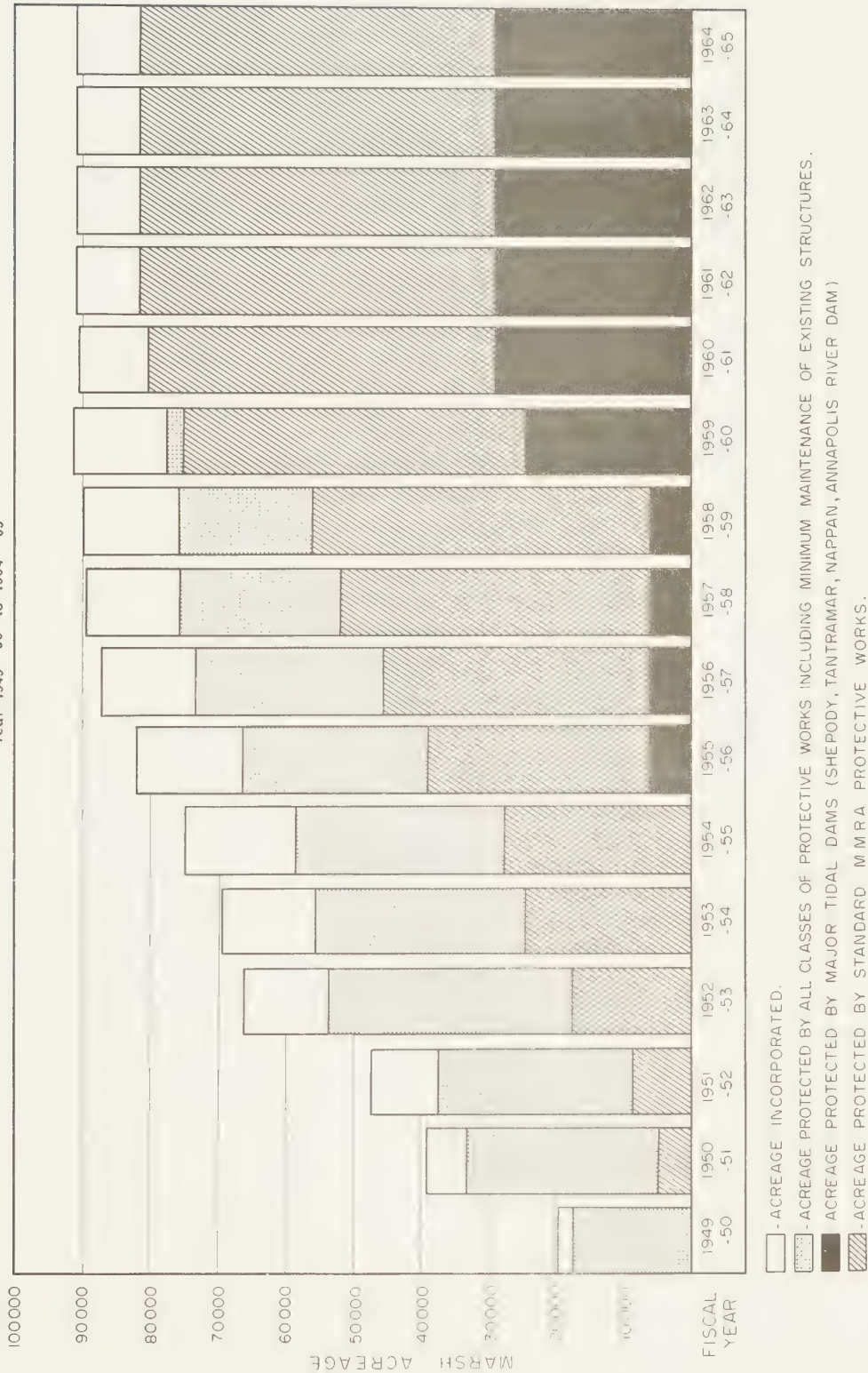
Johnston River	20,150.40	-
TOTAL EXPENDITURE FOR CONSTRUCTION AND MAINTENANCE OF PROJECTS AND SPECIAL SURVEYS	14,090,874.77	251,170.66
TOTAL EXPENDITURE FOR ADMINISTRA- TION, ENGINEERING, AND SUPER- VISION	<u>6,647,178.42</u>	<u>325.572.87</u>
TOTAL	<u>20,738,053.19</u>	<u>576,743.53</u>

APPENDIX III SPECIAL PROJECTS - FINANCIAL SHARING OF CAPITAL EXPENDITURES TO MARCH 31, 1965

Project	Particular Project Structure Contributed Towards	Gross Expenditure on Project to Date	Contributing Agency	Amount Contributed to Date
<u>NOVA SCOTIA</u>				
Annapolis Royal Dam	Aboiteau & Highway Causeway	\$2,526,328.51	Province of N.S.	\$914,815.35
Isgonish River Dam	Aboiteau & Highway Causeway	224,645.98	Province of N.S.	103,566.52
Nappan River Dam	Aboiteau & Highway Causeway	193,147.89	Province of N.S.	23,536.43
Bishop Beckwith Marsh	Aboiteau & Sewer Outlet	201,388.79	Town of Wolfville	1,880.85
Burntcoat Marsh	Aboiteau & Highway Causeway	28,543.65	Province of N.S.	14,957.53
River Hebert Marsh	Sewer Outlet for School	269,580.34	Province of N.S. (entire cost)	338.45
Kentville Marsh	Crib Bank Protection	24,207.71	Town of Kentville	2,414.66
Scotch Village Marsh	Aboiteau & Highway Crossing	34,995.40	Province of N.S.	4,239.48
St. Mary's Bay Marsh	Aboiteau & Highway Crossing	129,790.94	Province of N.S.	9,543.63
Tufts Marsh	Aboiteau & Highway Crossing	26,395.14	Province of N.S.	2,234.75
			TOTAL	\$1,077,527.65
<u>NEW BRUNSWICK</u>				
Tantramar River Dam	Aboiteau & Highway Causeway	909,630.37	Province of N.B.	200,948.06
College Bridge Marsh	Aboiteau & Highway & Railroad	227,691.01	CNR and Province of N.B.	96,896.38
Coles Island Marsh	Aboiteau & Railroad Structure	86,002.47	CNR	36,229.22
Black River Marsh	Aboiteau & Highway Causeway	23,700.19	Province of N.B.	9,042.03
Taylor Village Marsh	Dyke Protecting Bridge Approach	110,921.09	Province of N.B.	5,930.26
Belliveau Village Marsh	Placing Rock on Highway	28,222.58	Province of N.B. (entire cost)	470.45
Sackville Marsh	Aboiteau & Highway Causeway	79,200.00	Province of N.B.	15,000.00
			TOTAL	\$364,516.40

NOTE: Some of the payments from agencies participating in a project were not received in time to permit crediting to the particular project and there may therefore be variation between gross expenditures shown on this page and those derived from Appendix II.

APPENDIX IV
MMRA
SHOWING AREA INCORPORATED AND AREA PROTECTED
Nova Scotia - New Brunswick - P.E.I.
Year 1949 - 50 to 1964 - 65



APPENDIX V

MMRA STUDIES AND INVESTIGATIONS FOR ARDA PROJECTS

NOVA SCOTIA

March 31, 1965

MMRA Project No.	Name of Project	County	*Project Category	ARDA Project No.
ARDA 1-N.S.	Condon Lake	Kings	2	
ARDA 2-N.S.	Aylesford Bog	Kings	3	
ARDA 3-N.S.	Pleasant River	Queens	3	
ARDA 4-N.S.	Musquodoboit River	Halifax	1, 4	3059
ARDA 5-N.S.	Dewey Creek	Kings	2	3020
ARDA 6-N.S.	West Brook	Cumberland	3	
ARDA 7-N.S.	Stewiacke River	Colchester	1, 4	3025, 3026
ARDA 8-N.S.	Salmon & North Rivers	Colchester	1	
ARDA 9-N.S.	East River St. Mary's	Guysborough	1, 4	
ARDA 10-N.S.	West River St. Mary's	Guysborough	1, 4	
ARDA 11-N.S.	Margaree River	Inverness	1, 4	3026
ARDA 12-N.S.	Shubenacadie River	Colchester	1, 2, 4	
ARDA 13-N.S.	Middle River	Victoria	1	
ARDA 14-N.S.	Guysborough	Guysborough	1	
ARDA 15-N.S.	Baddeck River	Victoria	1	
ARDA 16-N.S.	Cornwallis River	Kings	2, 4	
ARDA 17-N.S.	Annapolis River	Annapolis	3	
ARDA 18-N.S.	Gold River	Lunenburg	1	
ARDA 19-N.S.	Beaver Meadow	Antigonish	3	
ARDA 20-N.S.	Parrsboro Dam	Cumberland	2	3056
ARDA 21-N.S.	East River- Sheet Harbour	Halifax	2	
ARDA 22-N.S.	Scotsburn Marsh	Pictou	3	
ARDA 23-N.S.	Middle River	Pictou	2, 4	
ARDA 24-N.S.	North River	Victoria	4	
ARDA 25-N.S.	River Philip	Cumberland	1, 4	
ARDA 26-N.S.	Halfway River	Cumberland	4	
ARDA 27-N.S.	Medway River	Annapolis & Queens	1, 4	
ARDA 28-N.S.	Pictou Harbour Causeway	Pictou	2	

*For Project Categories see Page 31.

NEW BRUNSWICK

MMRA Project No.	Name of Project	County	*Project Category	ARDA Project No.
ARDA 1-N.B.	Maugerville-Sheffield Interval Survey	Queens-Sunbury	3, 4	
ARDA 2-N.B.	St. Charles Peat Bog Survey	Kent	3	
ARDA 3-N.B.	North Shore R.D.A.	Gloucester		
ARDA 4-N.B.	Eel River	Restigouche	2	
ARDA 5-N.B.	Kennebecasis River Valley Survey	Kings	1, 4	4024
ARDA 6-N.B.	Upper Tantramar Region Develop- ment Study	Westmorland	3	4029
ARDA 7-N.B.	Tobique River Study	Victoria	1, 4	
ARDA 8-N.B.	Oromocto River, South Branch	Sunbury	4	
ARDA 9-N.B.	Coverdale River	Albert	4	
ARDA 10-N.B.	Dupuis Pond	Kent	2	
ARDA 11-N.B.	St. Norbert	Kent	2	
ARDA 12-N.B.	Hammond River	Kings	4	4024
ARDA 13-N.B.	Keswick Island	York	4	

PRINCE EDWARD ISLAND

MMRA Project No.	Name of Project	County	*Project Category	ARDA Project No.
ARDA 1-P.E.I.	Barlow's Dam (Wellington)	Prince	2	2031
ARDA 2-P.E.I.	Sutherland's Dam (Montague)	Kings	2	
ARDA 3-P.E.I.	Stewart's Dam (Vernon River)	Queens	2	
ARDA 4-P.E.I.	Paynter's Dam (Long River)	Queens	2	2019
ARDA 5-P.E.I.	Quigley's Dam (St. Peter's Bay)	Kings	2	2038
ARDA 6-P.E.I.	Robinson's Dam (Tyne Valley)	Prince	2	
ARDA 7-P.E.I.	Indian River	Prince	2	2040
ARDA 8-P.E.I.	St. Peter's Bay	Kings	2	

*For Project Categories see Page 31.

PRINCE EDWARD ISLAND (Continued)

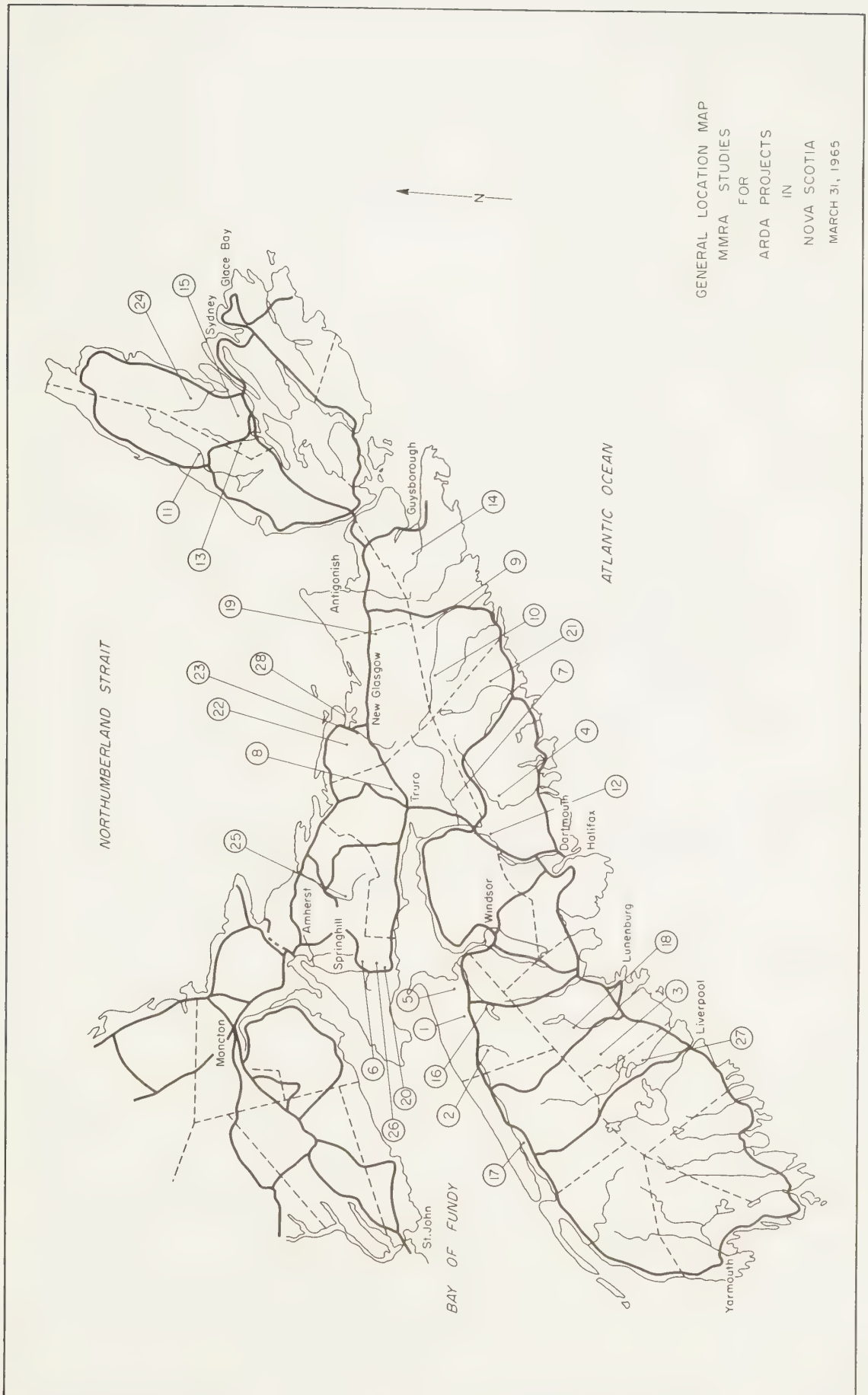
MMRA Project No.	Name of Project	County	*Project Category	ARDA Project No.
ARDA 9-P.E.I.	MacMillans Dam (Covehead River)	Queens	2	2042
ARDA 10-P.E.I.	Blanchard's Dam	Prince	2	2020
ARDA 11-P.E.I.	Arsenault's Dam	Prince	2	2021

NEWFOUNDLAND

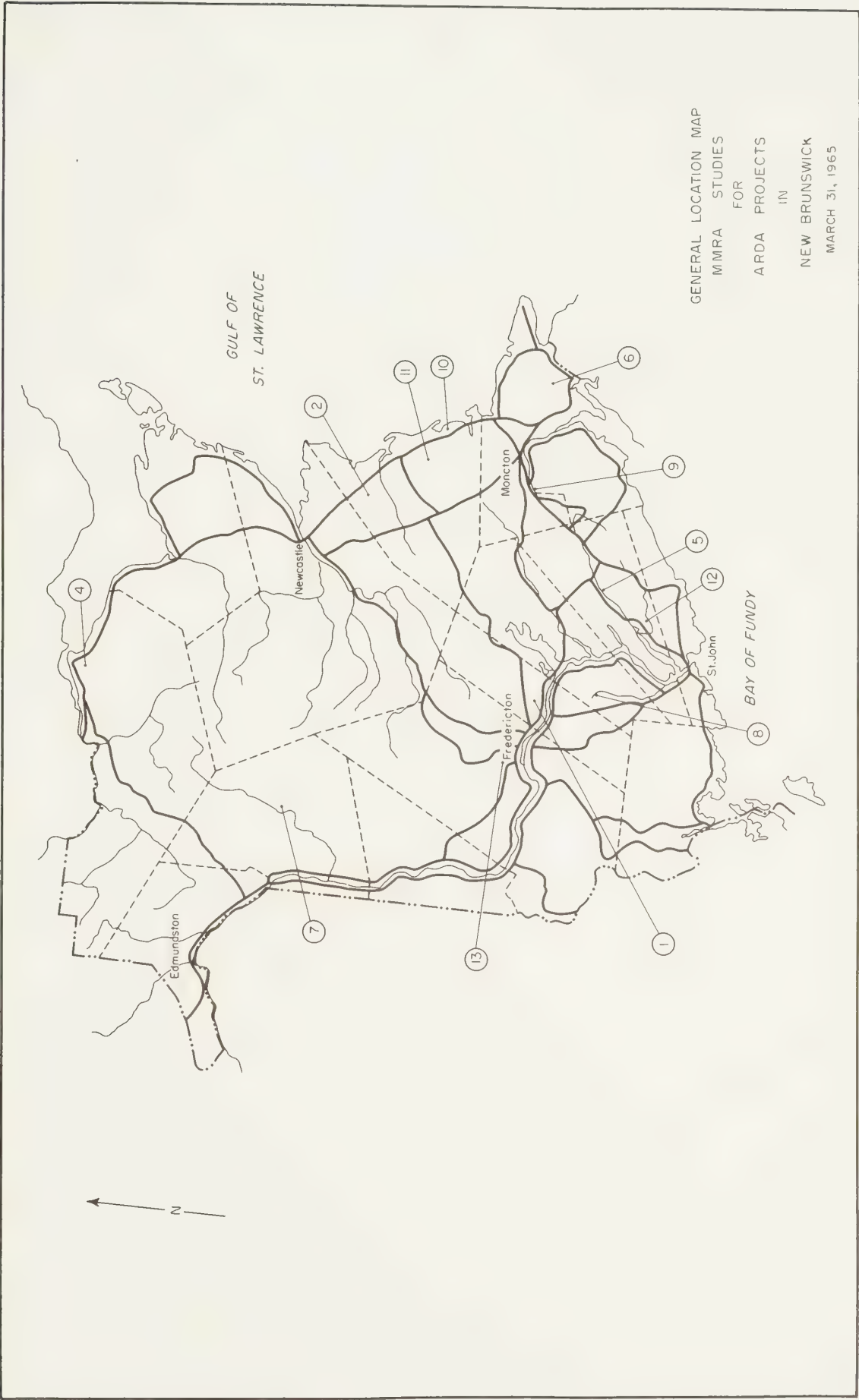
MMRA Project No.	Name of Project	County	*Project Category	ARDA Project No.
ARDA 1-Nfld.	Soil & Water Conservation	St. George- Port Au Port District	1, 4	
ARDA 2-Nfld.	Bay Bulls Road	St. John's South District	4	

*Project Categories: 1-Watershed Study
 2-Multiple-Purpose Plan
 3-Drainage Project
 4-Flood and Erosion Control

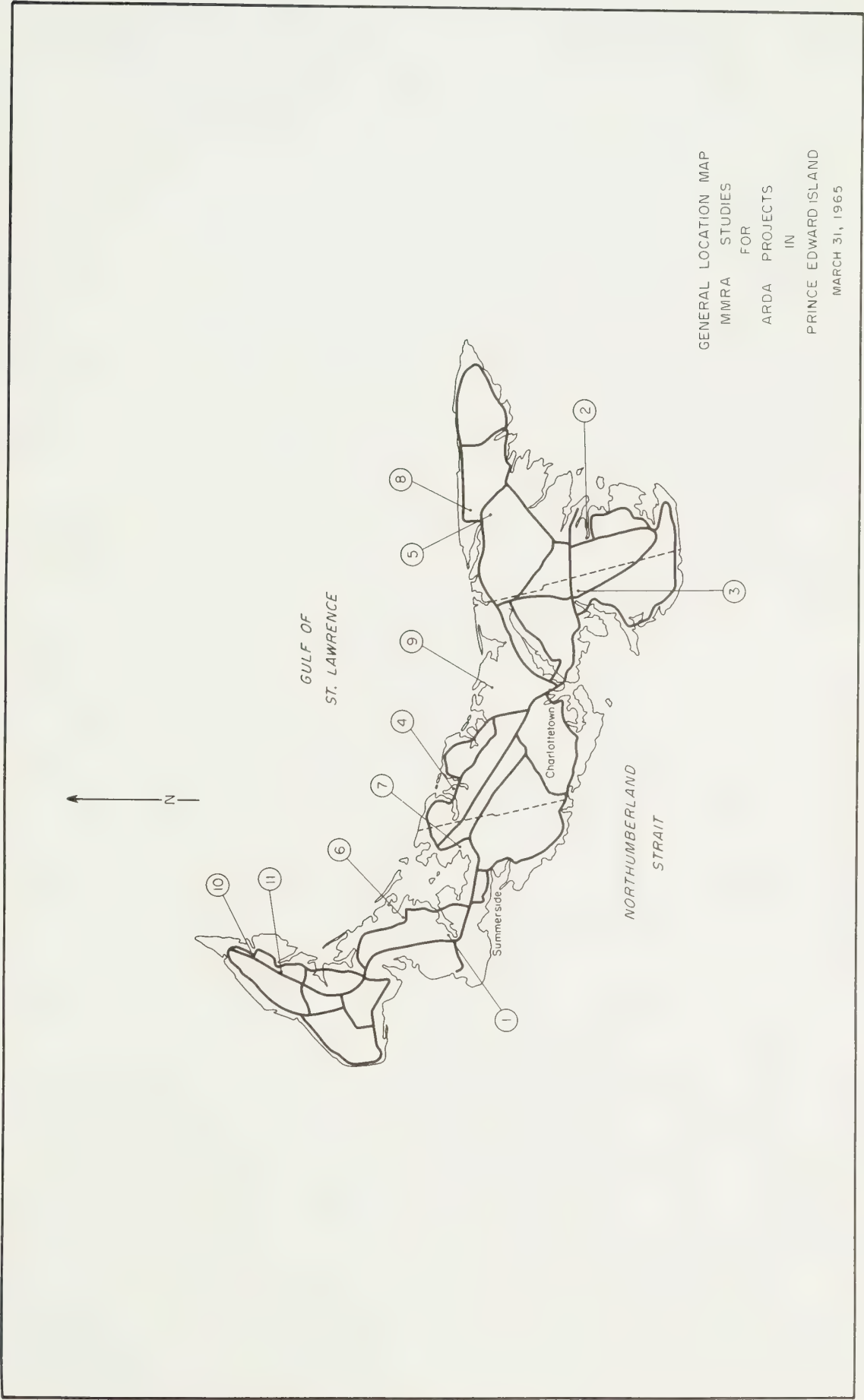
APPENDIX VI



APPENDIX VI (Continued)



APPENDIX VI (Concluded)



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